

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Y. HIRAIWA et al

Serial No.

Filed: August 28, 2003

For: DISK SUBSYSTEM, COMPUTER SYSTEM, STORAGE MANAGING METHOD  
AND PROGRAM

**INFORMATION DISCLOSURE STATEMENT (IDS)**  
**UNDER § 1.97 AND § 1.98**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

1. This IDS should be considered:

(a) when filed within three months of the filing date of the present application, or within three months of the filing date of the National Stage as set forth in § 1.491 in an international application, or before the mailing date of a first Office Action on the merits, whichever occurs last;

(b) when filed before the mailing date of either a Final Rejection under § 1.113 or a Notice of Allowance under § 1.311, whichever occurs first and when 1(a) does not apply. For this purpose, there is included herein either a certification in section 4 below (included when indicated by a marked box), or a fee of \$180.00 (a check in the amount of \$180.00 is enclosed, or if not see section 5 below);

(c) when filed prior to the payment of the Issue Fee, when 1(a)-(b) do not apply, and when a certification is included in section 4 below (included when indicated by a marked box); then the Applicant(s) hereby petition(s) and request(s) consideration of this IDS, and provided herewith is a fee of \$180.00 (a check in the amount of \$180.00 to cover the petition fee, or if not see section 5 below).

2. When 1(a)-(c) do not apply, then it is requested that this IDS be placed in the file.

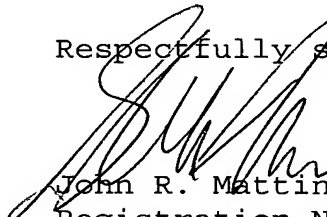
3. Listing of the information submitted is on the attached Form PTO-1449, which forms a part of this IDS. A copy of each listed document is enclosed when needed (needed for U.S. and foreign patents, publication or portion thereof listed; no copy of a U.S. patent application is needed; a copy of a document is not needed when previously submitted or previously cited by the PTO in a parent application of the present application as set forth under 35 U.S.C. § 120).

4. If a fee or additional fee is required, the Commissioner is hereby authorized to charge any fee or additional fee that may be required and credit any excess to Deposit Account No. 50-1417.

5. No explanation of relevancy is being provided for the documents listed in the attached PTO-1449 Form, because each is in the English language and/or discussed in the present Specification. Furthermore, an English language Abstract is being provided for the foreign language document JP-A-2002-7304.

6. If the PTO determines that part(s) of the required content is inadvertently omitted, then it is requested that the Applicant(s) be given additional time and specific identification of such omission(s) to enable full compliance.

Respectfully submitted,

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FORM PTO-1449 (REV. 7-80)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. ASA-1154	SERIAL NO.
<b>LIST OF DOCUMENTS CITED BY APPLICANT</b> <i>(Use several sheets if necessary)</i>		APPLICANT Y. HIRAIWA et al	
		FILING DATE August 28, 2003	GROUP

**U.S. PATENT DOCUMENTS**

* EXAMINER INITIAL	DOCUMENT	DATE	NAME	CLASS	SUBCLASS	FILING DATE (If Appropriate)
AA	2002/ 0069320A1	06/06/02	Yagi et al			
AB	6,477,619 B1	11/05/02	Fujimoto et al			
AC						
AD						
AE						
AF						
AG						
AH						
AI						
AJ						
AK						

**FOREIGN PATENT DOCUMENTS**

	DOCUMENT	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
AL	2002-7304	01/11/02	Japan w/English Abstract			<input type="checkbox"/>	<input type="checkbox"/>
AM						<input type="checkbox"/>	<input type="checkbox"/>
AN						<input type="checkbox"/>	<input type="checkbox"/>
AO						<input type="checkbox"/>	<input type="checkbox"/>
AP						<input type="checkbox"/>	<input type="checkbox"/>

**OTHER DOCUMENTS** *(Including Author, Title, Date, Pertinent Pages, etc.)*

AR		
AS		
AT		

EXAMINER

DATE CONSIDERED

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.